

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No: 10/541,828
Applicant: Ganga Raju Gokaraju et al.
Filed: July 12, 2005
Examiner: Valenrod, Yevgeny
Docket No.: DAD-0013
For: New double salts of (-)-hydroxycitric acid and a process for preparing the same

Commissioner of Patents
P.O. Box 1450
Alexandria VA 22313-1450

DECLARATION UNDER 37 C.F.R. § 1.132

I, Dr. S. Venkateswarlu, hereby declare and state as follows:

1. I am one of the inventors of the above-named application.

2. I am aware that the Examiner has issued a final office action and an advisory action in the above-named application. In particular, I understand that the Examiner has finally rejected the pending claims 1-5, 12-16 and 19 as being unpatentable over Shrivastava et al. (US 6,221,901).

3. I make this declaration to rebut the Examiner's assertion. It is my opinion that the claimed double salts of (-)-hydroxycitric acid described in the present application are not anticipated by or obvious over Shrivastava et al. (US 6,221,901) for at least the following reasons.

4. The teachings of Shrivastava show a solution containing magnesium ions that form a salt with each of COOH groups of the hydroxycitric acid and the linking of COOH groups through magnesium to satisfy the valency.

5. The Shrivastava composition is a physical blend of magnesium hydroxycitrate and a metal (Zinc) that will not form a double salt. One reason is because the Zinc ions suggested by Shrivastava, such as zinc oxide, are insoluble in water. The solubility of zinc increases with increasing acidity. All of the COOH groups in Shrivastava are bonded to magnesium ions, so there are no free COOH groups to make the solution acidic¹. As such, there is no way for the insoluble zinc ion to incorporate into the magnesium hydroxycitrate salt molecules in solution by replacing one of the magnesium ions.

6. Additionally, it is known in the art that more reactive metals will replace less reactive metals in single displacement reactions based upon their electronic properties; i.e. ionic potential. It is well known from standard reference tables that a Mg^{2+} ion is considerably more reactive than a Zn^{2+} ion. Thus, if both ions are present in a solution, and that solution has reached equilibrium, then the Mg^{2+} ions will remain bonded to the anion and / or will displace the Zn^{2+} ions that were so bonded. Hence, under normal conditions such as those described in Shrivastava, none of the Mg^{2+} ions in the single metal double salt can be replaced with a Zn^{2+} ion to produce a double metal salt such as claimed in the pending application claims because of the relative ionic potential of the magnesium and zinc ions.

7. In conclusion, Shrivastava neither discloses the claimed double salts, nor does it teach or suggest the claimed double salts.

8. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and

¹This is in direct contrast to the present application. For example, the zinc carbonate of Example 3 of the present application is soluble in water because of the increase acidity (or lowered pH) of the aqueous solution due to the presence of the hydroxycitric acid in the water.

further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent resulting therefrom.

S. Venturi

Signature

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I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with 37 CFR 1.6(a)(4):

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on June 29, 2009
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/Linda D. Kennedy/
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